FINAL REPORT

20010390

WESTERN BEEF DEVELOPMENT CENTRE (WBDC)

March 2005
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AGRI-FOOD INNOVATION FUND

Canada

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Report to Agri-Food Innovation Fund

Annual Report to Support the Funding Agreement Between AFIF and the WBDC

March 22, 2005

Project #20010390

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A. Description of the Project

The project is the generation and distribution of information that will improve the economic performance of the Western Canadian Beef Industry by the Western Beef Development Centre (WBDC).

The WBDC is a partnership involving the beef industry of Saskatchewan, the University of Saskatchewan, and Saskatchewan Agriculture, Food and Rural Revitalization. A research farm is operated at Lanigan and additional pastureland is leased near Pathlow, Saskatchewan. A Board of Directors made up of producers, researchers, and government personnel guided the WBDC programs.

B. Objectives

1. Transfer knowledge to the cow/calf sector, which will help enhance competitive advantage through increased profits, sustainable expansion, cross-sector integration, and value-added diversification.

2. Develop methods of improving the performance of beef animals under prairie conditions, which support herd expansion, optimize her performance, and promote the addition of sustainable beef management practices.

3. To be a Centre of Excellence in development of sustainable forage systems, cow/calf management, and production economics.

4. Work with industry to identify and address issues of concern in the Western Canadian beef industry.

C. 2004/05 Activities

Objective #1 – Transfer Knowledge to the Cow/Calf Sector

a) Cow/Calf Management Schools

9 one-day schools were held throughout Saskatchewan during February and March.

Locations	Attendance
Archerwill	19
Assiniboia	16
Duck Lake	9
Estevan	21
Glaslyn	33
Kerrobert	17
Maple Creek	20
Melville	32
Watrous	30
TOTAL	**197**

Participants paid a $40 registration fee and CARDS funded $24,500 towards the initiative. Main topics covered included marketing and Canadian Agricultural Income Stabilization (CAIS) program.

b) Field Day

A field day was held June 28 at the Termuende Farm at Lanigan for producers to see first hand some of the projects that the Centre was working on. The day started at the Lanigan Curling Rink with displays by Sponsors and a presentation on CAIS given by Tim Highmoor.

At the farm, participants were toured to the precipitation harvesting site, the water preference site, and nutrient management trials.

c) Fact Sheets and Newsletters

The following 12 fact sheets were produced during the year. These were mailed to approximately 3,000 subscribers and were also available for general distribution at trade shows, seminars, etc. The following is a list of facts sheets.

- Backgrounding Calves on Golden German Millet Swaths
- Backgrounding Calves on Swathed Corn and Barley
- Can the Feedlot Industry Expect Assistance from CAIS?

- If You are a Young Cow/calf Producer, Consider Joining CAIS
- If You're Thinking of Putting Up Extra Feed – Consider CAIS First
- 2004 Your CAIS Reference Margin May Be Larger Than You Think
- Are Cow/calf Profits Correlated with Lower Cost of Production?
- 2003 Sask COP Analysis
- What Size of Herd Earns the Highest Returns?
- How Much Money was Lost Feeding Cattle in 2003?
- 2002 & 2003 Feedlot Yardage Analysis
- Cowherd Yardage – How Do You Compare?

A general newsletter was produced and distributed to the mailing list. A press release announcing the transfer of the WBDC to PAMI was produced and sent to the media.

The WBDC continued to be a contributor to the Livestock and Forage Gazette. This publication is a joint effort of several organizations that work together to produce the newsletter rather than each one doing their own.

d) Technology Transfer Events

WBDC staff participated in a variety of activities to disseminate the information that is produced by the WBDC. This included such activities as trade shows, seminars, conferences, meetings, producer requests, media interviews, farm tours, website, etc.

The following is a list of technology transfer events conducted during the year.

- WBDC Cow/calf School, Carry-The-Kettle First Nation. (10 First Nation)
- SAFRR Research Update 2004. VIDO Board Room, University of Saskatchewan Campus. (25 industry)
- Saskatchewan Stock Growers Association Annual Meeting, Assiniboia, SK. (100 producers)
- Saskatchewan Pasture School. Saskatoon & Meacham, SK. (30 producers)
- Grazing On the Border Workshop. Lloydminster, AB. (55 producers)
- WBDC Field Day, June, Lanigan, SK. (90 producers)
- Stockholm Grazing Conference, Stockholm, SK. (200 producers)
- Monsanto Agrologist Update, Edmonton, AB. (30 industry)
- Chinese Delegation Tour of Termuende Farm. (20 researchers)
- Pathlow Field Day. (30 producers)
- Australian Tour of Termuende Farm. (20 industry)
- American Society of Animal Science Meetings, St. Louis, MO. (200 researchers)

- North Peace Forage Association Producer Tour, Termuende Farm, Lanigan, SK. (20 producers)
- Vaccine Infectious Disease Organization Beef Tech Meeting. Calgary, AB. (10 industry; 5 scientists)
- Ag Canada Field Day, Swift Current, SK. (30 industry; 20 researchers)
- ICDC Field Day, Outlook, SK. (55 producers)
- Western Nutrition Conference, Saskatoon, SK. (60 researchers; 60 industry)
- PFRA Tour, Termuende Farm. (150 producers)
- Animal Science 65 Student Tour, Lanigan, SK. Tour of WBDC Research and Demonstration Projects (15 students)
- Animal Science 410 Student Tour, Lanigan, SK. Tour of WBDC Research and Demonstration Projects (50 students)
- National Beef Science Seminar, Calgary, AB. (40 researchers)
- Western Canadian Agribition, Regina, SK. (200 producers)
- Vaccine Infectious Disease Organization Beef Tech Meeting. Calgary, AB. (10 industry; 5 scientists)
- Western Canadian Forage & Grazing Conference, Edmonton, AB. (200 producers; 50 industry; 30 researchers) (John Martens, Stuart Murray, Daryl Clark) Kelliher, SK. Information on aftermath grazing for beef cows.
- Don Lees, Arcola, SK. Information on water management for beef producers.
- John Collins, Kenaston, SK. Information on hybrid bromegrass, meadow bromegrass, crested wheatgrass and alfalfa
- Gary Thorstenstein, Foam Lake, SK. Information on barley/oat silage. BSE issues.
- Dave Goertz, MB. Information on WBDC activities.
- Dirk Vanas, Canora, SK. Information on growing corn and millet.
- Tony Boldt, Martensville, SK. Information on agronomics of meadow bromegrass, hybrid bromegrass, alfalfa 'AC Grazeland' for bison ranching.
- Brendan Donald, Melfort, SK. Information on WBDC research.
- Bruce Richards, Assiniboia, SK. Information on alfalfa grazing and renovation
- Miles Fuch, Fielding (Moosomin) SK. Information on grassing yearlings. Steers grazing smooth bromegrass pastures.
- Charlie Crocker, Saskatoon, SK. Information on corn grazing for buffalo
- Kevin Paulsen, Hodgeville, SK. Information on backgrounding rations, pellets etc.
- Greg Tanner, Stoughton, SK. Information on Grain to Grass.
- Mark Woodworth, Elrose, SK. Information on nose pumps for calves.
- Floyd Bartel, Drake, SK. Information on Alfasure for grazing alfalfa.

- Blaine Hjertaas, Redvers, SK. Information on Hollistic Grazing
- Ivan Bartel, Lanigan, SK. Information on grazing cicer milk vetch.
- Bruce Barker, AB. Information on corn varieties
- Darrell Keilau, Meadow Lake, SK. Information on grazing fall ryegrass.
- Ed Schafer, Meadow Lake, SK. Information on canola silage and trace minerals
- Mark Hetchler, Melfort, SK. Information on spraying corn.
- Bob Bennett, Arcola, SK. Information on quiet weaning and nose paddles.
- Bruce Rouse, Deslisle, SK. Information on grazing green oats and nitrate toxicity.
- Floyd Bartel, Drake, SK. Information on grazing frozen corn.
- Corey L., Balcarres, SK. Information on nitrate levels in feeds, Westford barley and loose smut
- Keith Barber, Foam Lake, SK. Information on ammoniation of high moisture feeds
- Jack Rynsberger, Melville, SK. Information on weaning calves, grazing corn and marketing calves
- Harold Gerbrandt, Waldeck, SK. Information on elevated sulphate levels in well water.
- Kelly Howe, Cargill Ltd., Lethbridge, AB. Information on Potassium (K+) levels in forages and manure application rates
- Christie N. Pioneer Hybrids, Saskatoon, SK. Information on "Agronomics of Grazing Corn".
- Rob Ripley, Monsanto Canada Inc., Saskatoon, SK. Ruminant nutrition of grazing corn.
- Brian Zwaan, Prairie Seeds, St. Denis, SK. Information on grazing corn.
- Dr. Merle Olsen, Rafter 8 Products, Calgary, AB. Information on grazing alfalfa and Alfasure.
- Jim Danyluk, SAFRR, Meadow Lake, SK. Information on hemp production.
- Mark Johns, AAFRD, Stettler, AB. Information on rejuvenation.
- Novartis Animal Health Ltd. Information on vaccines. Lee Irvine reference
- Farm & Food Report, SAFRR. Information on Cu deficiency and sulphate levels.
- Neil McLeod, Prairie Seeds, Outlook, AB. Information on utilizing swine manure and effluent on corn.
- Robbie Lavely, Delta, Colorado, U.S.A. Information on corn varieties.
- Gordon Hutton, AAFRD, Airdrie, AB. Feeding Systems for Wintering Beef Cows.
- Ashley H. Bayer Crops. Information on seeding Timothy.

- Bob Klemmer, SAFRR, Weyburn, SK. Information on finishing steers on alfalfa.
- Drs. A. Iwaasa & Scott, AAFC Swift Current, AAFC Brandon. Information on supplementing steers on pasture with oilseeds.
- Leah Frohlick, Lakeland Agriculture Research Association, Lac La Biche, AB. Information on "Economics of Litter on Pasture"
- Ryan C., Cargill Ltd., Raymore, SK. Information on dribble banded 28-0-0 on pasture and grazing.
- Brad White, Prime Pro, Shaunavon, SK. Information on seeding red millet.
- Al Foster, SAFRR, Tisdale, SK. Information on hay preservatives.
- Jamie Salisbury, Prime Pro, Biggar, SK. Information on Grazon.
- Nikki Krupp, Gateway Research Organization, Westlock, AB. Information on pasture rejuvenation.
- Mark Kidnie, Monsanto Canada Inc., Edmonton, AB. Information on ruminant nutrition when grazing corn.
- Shawn Fairburn, New Life Feeds Ltd. Saskatoon, SK. Information on mustard silage
- Jolene Weisbauer, Fairview College, Fairview, AB. Information on broadleaf control for millet.
- Kevin Halverson, USDA-NRC, Stevens Point, Wisconsin. Information on water quality research.
- Barry Yaremcio, AAFRD, Stettler, AB. Information on feed wastage study.
- Mona Lee Kirkland, AAFRD, Lloydminster, AB. Information on oil contamination on pasture.
- Gerome Warwick, Prairie Seeds, Bruno, SK. Information on grazing oats for green feed.
- Bill Kowalenko, SAFRR, Outlook, SK. Information on composting feedlot manure.
- Bob Pavelich, Ohio State University. Information on swath grazing barley and barley pea mixtures.
- Jody Tondell, Bruno Feeds, Bruno, SK. Information on feeding frozen wheat or barley in ruminant rations.
- CTK Cow/Calf School, Sintaluta, SK.
- Ag Ec 343 Lecture, University of Saskatchewan, Saskatoon, SK.
- RM #42 Kingsley, Kipling, SK.
- Saskatchewan Pasture School, Saskatoon, SK.
- Farming for Profit Conference, Moose Jaw, SK.
- Country 800 AM Radio, Interview
- ABP Meeting, Calgary, AB.
- Raymore Producer Meeting, Raymore, SK.

- Doug Mann Producer Meeting, Swift Current, SK.
- CKSA 570 Swift Current, Interview
- Ag Ec 320 Lecture, University of Saskatchewan, Saskatoon, SK.
- Foraging into the Future, Swift Current, SK.
- Meeting at Neepawa, MB. Information on cost of production and CAIS
- Meeting at Virden, MB. Information on cost of production and CAIS
- Meeting at Meacham, SK. Information on cost of production and CAIS
- Meeting at Lloydminster, SK. Information on cost of production and CAIS
- Meeting at Regina, SK. Information on cost of production and CAIS
- Meeting at Tugaske, SK. Information on cost of production and CAIS
- Meeting at Eastend, SK. Information on cost of production and CAIS
- Meeting at Beechey, SK. Information on cost of production and CAIS
- Meeting at Radville, SK. Information on cost of production and CAIS
- CJWW, Neil Billinger. Information on WBDC Cow/calf Management Schools
- CBC TV, Saskatoon. Karem J. Information on water preference research
- CBC Radio, Calgary, AB. Kathy Little. Information on water quality & water preference research
- Farm Gate, CJQC TV, Bob Simpson. Information on WBDC Field Day – Nutrient Management; Corn Grazing; Cow/calf Management Schools
- CJWW, Gail Mattern. WBDC Field Day 2004
- 1280 Estevan Radio. Information on CAIS

Objective #2 – Develop Methods to Improve Performance of Beef Cattle

1. **Precipitation Harvesting**
   - Collaboration between Western Beef Development Centre (Dr. Bart Lardner; Russel Kirzinger), Prairie Agriculture Machinery Institute (Gord Hultgreen; Phil Leduc; Wayne Stock), and Prairie Farm Rehabilitation Administration (Rob May; Barclay Shuba; JimYarotski).
   - Precipitation Harvesting is a 3-year project set up at Termuende Research Farm, Lanigan, SK. The project was set up during the spring of 2004. Two different size holding ponds were put in place and data recording equipment set up.
   - The purpose of the study is to conduct research and demonstration of precipitation harvesting for agricultural purposes. The project will be another option that agricultural producers will have to access good quality water. The group consensus was that the project is very viable and will present an excellent opportunity to illustrate another water source to producers.
   - The project is designed to handle 10 and 30 head of cattle (total 40 head), but that this is subject to rainfall amounts. The number that the project can handle could be more or less than designed amounts

2. **Effect Of Creep Feed On Calf Pasture Performance**
   - Collaboration between Western Beef Development Centre (Dr. Bart Lardner) and Feed-Rite Ridley Inc. (Dr. Alan Vaage).
   - To investigate the effect of pre-exposure and creep feed supplementation on cow and calf performance on pasture.
   - 24 cow/calf pairs were randomly allocated to one of three creep treatments. The treatments included Ration A (whole oats), Ration B (starch based creep) and Ration C (digestible fiber based creep)
   - Animals were allocated to one of three 12-acre crested wheatgrass paddocks for minimum of 21 days. All cow/calf pairs were then re-assigned to one of three different 12-acre paddocks for another 21 days.
   - Effect of creep supplementation on calf growth, calf intake, cow performance, forage utilization was measured.

3. **Evaluation Of Alfasure Liquid Supplement For Grazing Alfalfa Pastures**
   - Collaboration between Western Beef Development Centre (Dr. Bart Lardner; Jamie Mamer), Rafter Eight Products (Dr. Merle Olsen; Bobby Olsen), Saskatchewan Agriculture, Food & Rural Revitalization (Forage & Livestock Agrologists).
   - 18 producer demonstration sites were set up across Saskatchewan (including Termuende Farm, Lanigan) to evaluate the use of ALFASURE, a liquid bloat control product.
   - All sites evaluated animal performance from grazing either a grass-legume or pure legume pasture. Animal gains, grazing days, and number of bloats were recorded.
   - All producer sites weighed cattle on and off pasture. A field day was held at each site during the summer.
   - A Saskatchewan Coordinator (Jamie Mamer) was hired by the WBDC to supervise the project.

4. **Economics Of Forage Based Production Systems For Saskatchewan**
   - Collaboration between Western Beef Development Centre (Dr. Bart Lardner), Saskatchewan Agriculture & Rural Revitalization (Al Foster) and Western Forage Beef Group (Duane McCartney). This is a 4-year project funded by Saskatchewan Beef Development Fund.
   - The objectives of this research are to (i) Determine the production potential and quality of new and established forages under grazed conditions. (ii) Determine total beef production per acre from a managed rotational system. (iii) Determine the economic returns of forage and beef production from these pasture types. (iv) Determine the net return to equity per acre from grazing grass, legume and mixed forage stands and (v) Use the results to make recommendations to Saskatchewan producers and SAFRR agrologists as to grazing and economic potential for these forages.
   - This research will provide new information on grazing livestock performance, forage persistence, production and quality and important economics on new forage species for the growing body of new and existing producers in the Saskatchewan cow/calf industry. The goal of this project is to determine which pasture types provide sound economic returns per acre under rotational management. Additionally, the initial work of forage establishment has already begun as all varieties were established in 2002 and 2003. All paddocks were seeded over the last two years and the first year of animal and forage data was collected from the 2003-grazing season.

- Extending the summer and fall use of perennial forages can be expected to make the Saskatchewan beef industry more sustainable and profitable.

5. **Effect Of Water Quality On Steer Performance On Pasture**
   - Collaboration between Western Beef Development Centre (Dr. Bart Lardner), Agriculture & Agri-Food Canada (Dr. Walter Willms), Prairie Farm Rehabilitation Administration (Larry Braul; Brant Kirychuk; Jim Yarotski).
   - To evaluate the effect of water quality on steer performance on pasture.
   - Cattle were provided direct access to water in a dugout, in a trough, aerated in a trough, coagulated in a trough, or well water in a trough.
   - Steer gain, parasite load, and pasture utilization were monitored.
   - This was the sixth year of the study, running consecutively from 1999-2004.

6. **Steer Preference Of Several Water Types**
   - Collaboration between Western Beef Development Centre (Dr. Bart Lardner) and Prairie Farm Rehabilitation Administration (Larry Braul; Brant Kirychuk; Jim Yarotski)
   - To evaluate steer drinking time and water consumption of several water types through direct access to type water - aerated, ozonated, coagulated, and well water.

7. **Effect Of Animal Density On Nutrient Utilization Of Grazing Corn**
   - Collaboration between Monsanto Canada Inc. (Rob Ripley) and Western Beef Development Centre (Dr. Bart Lardner)
   - To evaluate differences in cow performance, cow condition, animal grazing days, corn yield and quality between animals when grazing corn during the winter.

8. **Growth & Response Of Nursing Calves To Spring Treatment With An Endectocide**
   - Novartis Animal Health (Dr. Grant Royan) and Western Beef Development Centre
   - Compare the performance of nursing calves, from spring turn-out on grass to weaning.
   - Administration of 2 different endectocides and different methods of application of 1 endectocide to untreated suckling calves.

9. **Calf Backgrounding Trial Feeding High-Fat:Low-Lignin Oats**
   - Western Beef Development Centre and Dept. Animal & Poultry Science (Dr. John McKinnon; Grant Zalenko)

- To investigate the effect of high-fat:low lignin oats, either processed or whole in a backgrounding ration, on weaned calf growth.

Objective #3 – Centre of Excellence

1. **Benchmark Cost of Production Analysis for Saskatchewan Cowherds, Feedlots, and Forage Producers**
   - Assisted 20 cowherds and feedlots across Saskatchewan in calculating the costs of production associated with raising cattle and growing forages.
   - Participants in the program benefit, but in addition the results of the study are published in popular agriculture newspapers (such as the Canadian Cattleman & Western Producer) for cattleman from across Western Canada use as benchmarks for their operations.
   - Benchmarking is a powerful tool that allows producers to compare their operation to an average and thus determine where they need to improve their operation in order to remain competitive with the rest of the industry.
   - Funding for the cost of production analysis is sponsored by the Cattle Marketing Deductions Fund.

2. **Cowherd Record Keeping Systems – CHAPS**
   - Cow Herd Analysis Performance Software (CHAPS) is a user-friendly software package, which allows producers to keep organized individual production records on each animal in their herd.
   - The benefit of the program is that it allows producers the ability to quickly and accurately determine which animals in their herd are top producers and which are not.
   - The goal of having producers using this program is to help them improve the productive performance of their cowherd to an optimal level.
   - Currently there are over 275 producers from across Saskatchewan using the program for cowherd record keeping purposes.
   - Funding for this program is provided by CARDS Saskatchewan.

3. **Research Update To SAFRR Livestock & Forage Staff**
   - Seminar research sessions planned along with SAFRR Agrologists.
   - Update to include Beef & Forage related research at the University of Saskatchewan (Depts. Animal Science, Plant Science, Agriculture Economics), Western College of Veterinary Medicine, Agriculture & Agri-Food Canada, Vaccine Infectious Disease Organization, Western Beef Development Centre.

- Updates from researchers:
    - Agriculture & Agri-Food Canada
    - Department of Animal & Poultry Science
    - Department of Plant Sciences
    - Western College of Veterinary Medicine
    - Food Innovation Centre
    - Western Beef Development Centre

4. **FORAGEBEEF.COM**
    - Involved with forgebeef.com project since 2000. Project involving Western Forage Beef Group, AAFRD Staff, SAFRR Staff, MAF Staff, AAFC Staff, and WBDC.
    - Review of Knowledge Nuggets for FORAGE and BEEF information for the WEBSITE.
    - Provided information for WEBSITE on Rejuvenation, Forage Management, Forage Fertility and Production.
    - WEBSITE will provide producers, extension agents, researchers, university staff with the Top 10 things on FORAGES & BEEF including forage management, beef management, breeding, nutrition, marketing, animal health, genetics, production.

5. **Beef and Forage Research In Canada (BFRIC)**
    - Objective was to develop a more comprehensive database pertaining to all aspects of beef and forage research in Canada.
    - Report is more comprehensive than that currently found on the Inventory of Canadian Agriculture Research (ICAR) website, http://res2.agr.ca/icar/.
    - Current research projects from previous two years, 2001, 2002 and 2003, 2004 and 2005.
    - Project includes those currently inventoried on ICAR and those not listed on ICAR but funded by federal, provincial and industry funding agencies.
    - Developed a WEB based DATA BASE. This database is housed on the WBDC website – WWW.WBDC.SK.CA/BFRIC.

6. **2004 Saskatchewan Pasture School**
    - Two-day Saskatchewan Pasture School involved a coordinated effort between Saskatchewan Forage Council; Saskatchewan Watershed Authority; Ducks Unlimited; Saskatchewan Agriculture, Food and Rural Revitalization; Prairie Farm Rehabilitation Administration; and Western Beef Development Centre.

Objective #4 – Identify Issues and Concerns of the Beef Industry

- The BSE crisis continues to be a major issue for Canadian cattle producers. The recently announced CAIS program was of great interest to producers during 2004.
- The WBDC conducted and discussed the program at several meetings and cow/calf schools throughout the year. Information focused on methods that cattle producers could use to obtain maximum benefit from the program.

D. Financial

As the 2004/05 fiscal year is not yet complete, it is not possible to provide financial statements for the whole year. Unaudited statements are included to February 28. The audit of WBDC is scheduled for May 30, so audited statements will be available by the end of June.

See Appendix I for 2004/05 financial information.

E. Overall Project Summary

The project was a 3-year project that ends on March 31, 2005. Total funding of the project was $750,000 provided by the Agri-Food Innovation Fund.

1. Milestones

The project identified the following milestones, all of which have been met.

- Construction of research pens
- Water quality research project
- Stockpiling of perennials
- Documentation – research ouputs
- Grain to grass project
- Feedlot – cost of production
- Cost of production – assessment tools
- CCIA – electronic evaluation and carcass trace back
- Quality assurance program

2. Technology Transfer

Communications plans or technology transfer was identified as a deliverable in the agreement. Throughout the period of this agreement, the WBDC utilized many means of transferring information on beef production and economics. Specific information regarding these activities is in the reports for each year of the project.

- Website: approximately 20,000 visits
- Fact sheets
- Newsletters
- Tradeshows
- Seminars
- Conferences
- Meetings
- Cow/calf Schools
- Radio interviews
- T.V. interviews
- Newspaper articles
- Field days
- Published papers
- Farm tours
- Producer requests
- Government representatives

3. Research

Through an agreement with the Horned Cattle Purchase Fund, the WBDC maintained a cattle herd consisting of 300 breeding females. These cattle and their offspring were utilized on a series of research projects during the 3-year period of this agreement. Specific project details are contained in the individual reports for each year of the agreement. Outputs from these projects was disseminated to producers through the technology transfer program.

4. Transition and Future Plans

During the final year of this agreement (2004/05), a decision was made to transfer the operations of the WBDC to PAMI effective April 1, 2005. Meanwhile, effective October 1, 2004, PAMI managed the WBDC through a management contract. This management was required as a result of the resignation of the executive director of the WBDC.

Existing staff of the WBDC were given the option of applying for continual employment at PAMI or a severance package. Two staff chose the severance option while the WBDC farm manager, Russ Kirzinger, was hired by PAMI. Negotiations are in the final stages with Dr. Bart Lardner for the lead scientist position. Interviews have taken place for an economist and an offer is pending. Plans are to hire a research technician early in 2005/06.

5. Financial

Funding of this project was over 3-fiscal years.

Total Funding	$750,000
Received-to-date	700,000
Due upon receipt of this report	$ 50,000

See Appendix II for overall financial information.